Claims

1. One-part piston for an internal combustion engine,

- having a piston crown (4),
- having two pin boss supports (9, 9′) molded onto the piston crown (4) for one pin boss (11, 11′) each, whereby the pin boss supports (9, 9′) and the faces (12) of the pin bosses (11, 11′) are disposed set back relative to the radially outer edge of the piston crown (4), in the direction of the piston longitudinal axis (13),
- having two skirt elements (14, 14′) that connect the pin bosses (11, 11′), which are connected with the piston crown by way of one skirt connection (10, 10′) each, whereby recesses (16) are molded into the shaft connections (10, 10′) between the skirt elements (14, 14′) and the piston crown (4),
- having a ring-shaped cooling channel (6) disposed in the edge region of the piston crown (4), the radially outer delimitation of which is formed by a ring wall (7) molded onto the piston crown (4), and the radially inner delimitation of which is formed partly by the pin boss supports (9, 9′) and partly by the skirt connections (10, 10′), and
- having a projection (17) that runs around the circumference and is partly molded onto the pin boss

supports (9, 9') and partly onto the skirt connections (10, 10'), and is nose-shaped in cross-section,

characterized in that

- the cooling channel (6) is closed off by a ring (18) that essentially has a cylinder shape, which ring has an axially oriented continuous gap (22) and is closed with a circumferential collar (20) disposed on its outside, which forms a snap-in connection with a circumferential groove (19) molded into the inside (28) of the ring wall (7), whereby the ring (18) makes contact on the projection (17).

2. One-part piston (1) for an internal combustion engine, according to claim 1, **characterized by** an axially oriented bore (24) made in one of the skirt connections (14, 14'), into which an oil feed pipe (35) can be introduced, which pipe opens into the cooling channel (6), with its upper part (27), in the region of the ring (18), whereby the ring (18) makes contact with the upper part (27) of the oil feed pipe (35) with its joint ends (29, 30).

3. One-part piston (1) for an internal combustion engine, according to claim 2, **characterized in that** the upper part (27) has a circumferential groove (25) on its outside, close to its face (33) on the piston crown side, with which groove projections (26, 26') made on the joints (29, 30) of the

ring (18) form snap-in connections after the oil feed ring (35) is introduced into the bore (24).

4. One-part piston (1) for an internal combustion engine, according to claim 3, **characterized in that** the groove (25) is disposed at a distance from the face (33) of the upper part (27), so that an excess length (34) of the upper part (27) above the ring (18) results.

5. One-part piston (1) for an internal combustion engine, according to claim 2 to 4, **characterized in that** the upper part (27) has a nose (23) in the center region of its outside, which nose rests on the upper edge of the bore (24) after the oil feed pipe (35) has been introduced into the bore (24).

6. One-part piston (1) for an internal combustion engine, according to one of claims 2 to 5, **characterized in that** the oil feed pipe (35) consists of metal.

7. One-part piston (1) for an internal combustion engine, according to one of claims 2 to 5, **characterized in that** the oil feed pipe (35) consists of a heat-resistant plastic.

8. One-part piston (1) for an internal combustion engine, according to one of the preceding claims, **characterized in that** the ring (18) consists of metal.

9. One-part piston (1) for an internal combustion engine, according to one of the preceding claims, **characterized in that** the ring (18) consists of a heat-resistant plastic.